



STEERING COLUMNS



FEATURES

- KA's unique modular, self-supported designs
- Modular building blocks for tilt and telescope functions
- Variable steering column length
- Variable position of tilt and telescope
- Variable angles for tilt function and step in and step out positions
- Tilt locking system, incremental or infinity locking
- Telescope function with infinite positioning, low or high telescope positions
- Compatible with all types of steering wheel connections
- Single hand lever, foot pedal or cable operated release
- Compatible with all types of hydraulic pump interfaces
- Vibration damping systems
- Optional driver control modules, switches, horn module, covers and displays

Product Description

Kongsberg Automotive offers a full range of fixed, tilt and telescopic steering columns, designed to withstand the most challenging environments for off-road vehicles. With our unique modular design, all columns provide best-in-class ergonomic working conditions for the driver.

Benefits

- Fully developed, tooled up and validated concepts
- High component commonality, enables short lead time on launches and modification

- Minimal capital and design investment
- Unique modular design our steering column range enables best-in-class ergonomic working conditions for the driver
- Highly experienced engineering and manufacturing team with over 20 years of market & product knowledge

Kongsberg Automotive offers completely tailored steering columns from our modular system according to customer specifications with full in-house design, development and validation services.

Contact:

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STEERING COLUMNS

Product Specifications

Fixed and Telescope Columns



Fixed Column
F100



Telescope Column
T200

General Specification

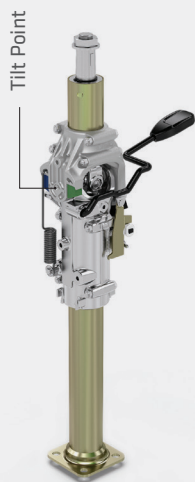
All columns can be specified by customer, including:

- Column length (From 100mm to 700mm)
- Connection to steering wheel, Ø 20 and 25 with different cones and serrations
- Telescope stroke: 85mm
- Top tube dimension 45 mm

Tilt Columns



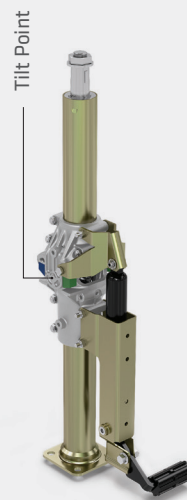
Low Tilt Column
T350



Tilt Column
T400



Tilt Column
T425



Tilt Column
T450

General Specification

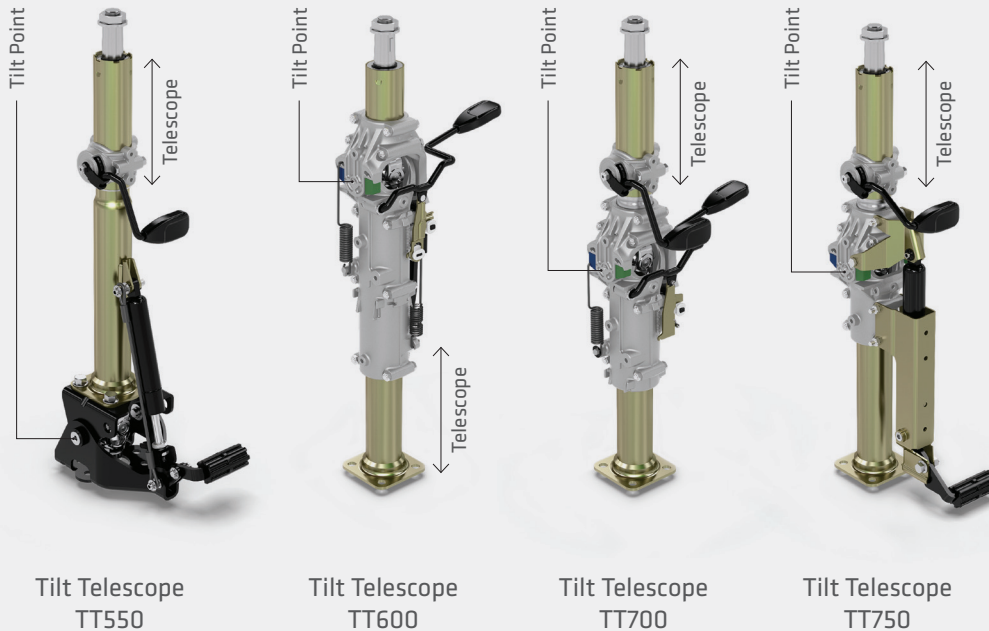
All columns can be specified by customer, including:

- Column length (From 100mm to 700mm)
- Connection to steering wheel, Ø 20 and 25 with different cones and serrations
- Tilt angle area: $\pm 24^\circ$, step in/step out 36/52°
- Top tube dimension 45 mm

STEERING COLUMNS

Product Specifications

Tilt and Telescope Columns

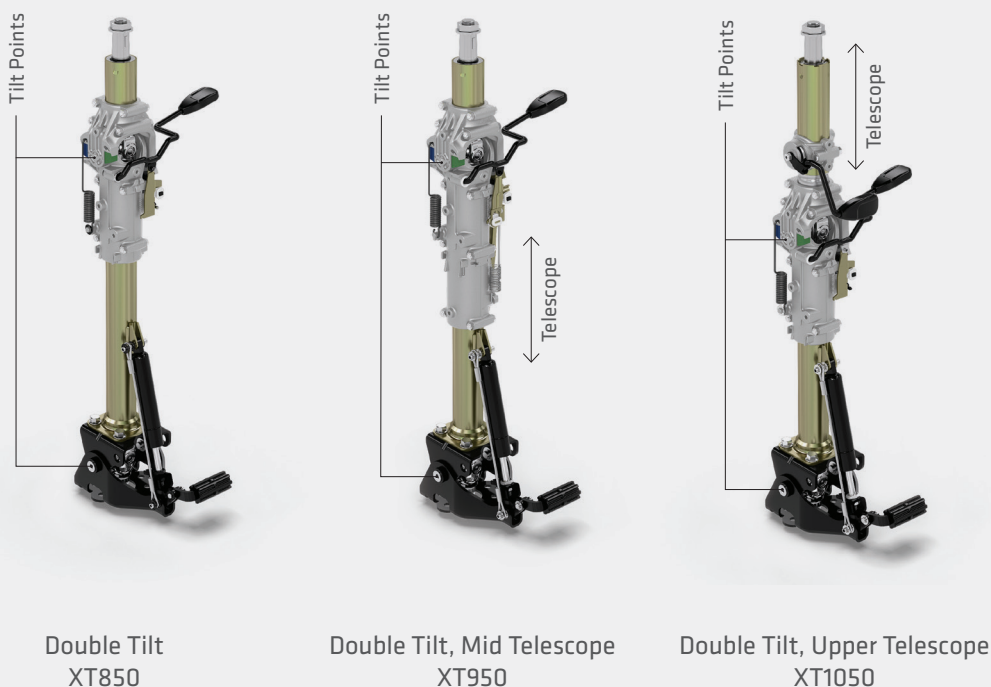


General Specifications

All columns can be specified by customer, including:

- Column length (From 100mm to 700mm)
- Connection to steering wheel, \varnothing 20 and 25 with different cones and serrations
- Tilt angle area: $\pm 24^\circ$, step in/step out 36/52°
- Telescope stroke: 85mm
- Top tube dimension 45 mm

Double Tilt and Telescope Columns



General Specifications

All columns can be specified by customer, including:

- Column length (From 100mm to 700mm)
- Connection to steering wheel, \varnothing 20 and 25 with different cones and serrations
- Tilt angle area: $\pm 24^\circ$, step in/step out 36/52°
- Telescope stroke: 85mm
- Top tube dimension 45 mm

STEERING COLUMNS

Steering Column Range Summary



F100 T200 T350 T400 T425 T450 TT550



TT600 TT700 TT750 XT850 XT950 XT1050

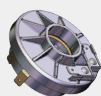
Steering Column Features

KA columns are available with covers, bellow and a range of integrated switches and shifters

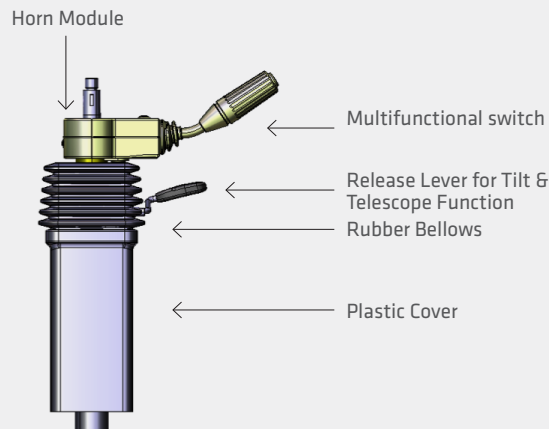
Switches can be fixed direct to the steering tube and positioned with index hole



Indicator, Horn, Light, Wipers, FNR



Horn module



Steering Column Cover Concept



General Specifications

STANDARD ISO 5010 AND SAE J1814

- The specification of all steering columns is according to ISO 5010 and SAE J1814.
- All columns meets Kongsberg Automotive product specification for off road vehicles, agricultural tractors and construction equipment

Test and Validation

- All columns are tested and validated according to Kongsberg Automotive product specification and above mentioned standards

Steering Column

Steering column module including:

- Steering column
- Covers
- Display
- Switches
- Indicator switch
- Light switch
- Key switch
- FNR switch